

**There's a great, big,  
beautiful tomorrow**

with intrinsic Web layouts



# Josh Tumath

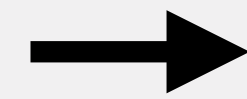
Front-End Web Developer

Presentation Layer, Core Services

The world of  
**TODAY**



The world of  
**TOMORROW**



The principals of  
**TOMORROW**

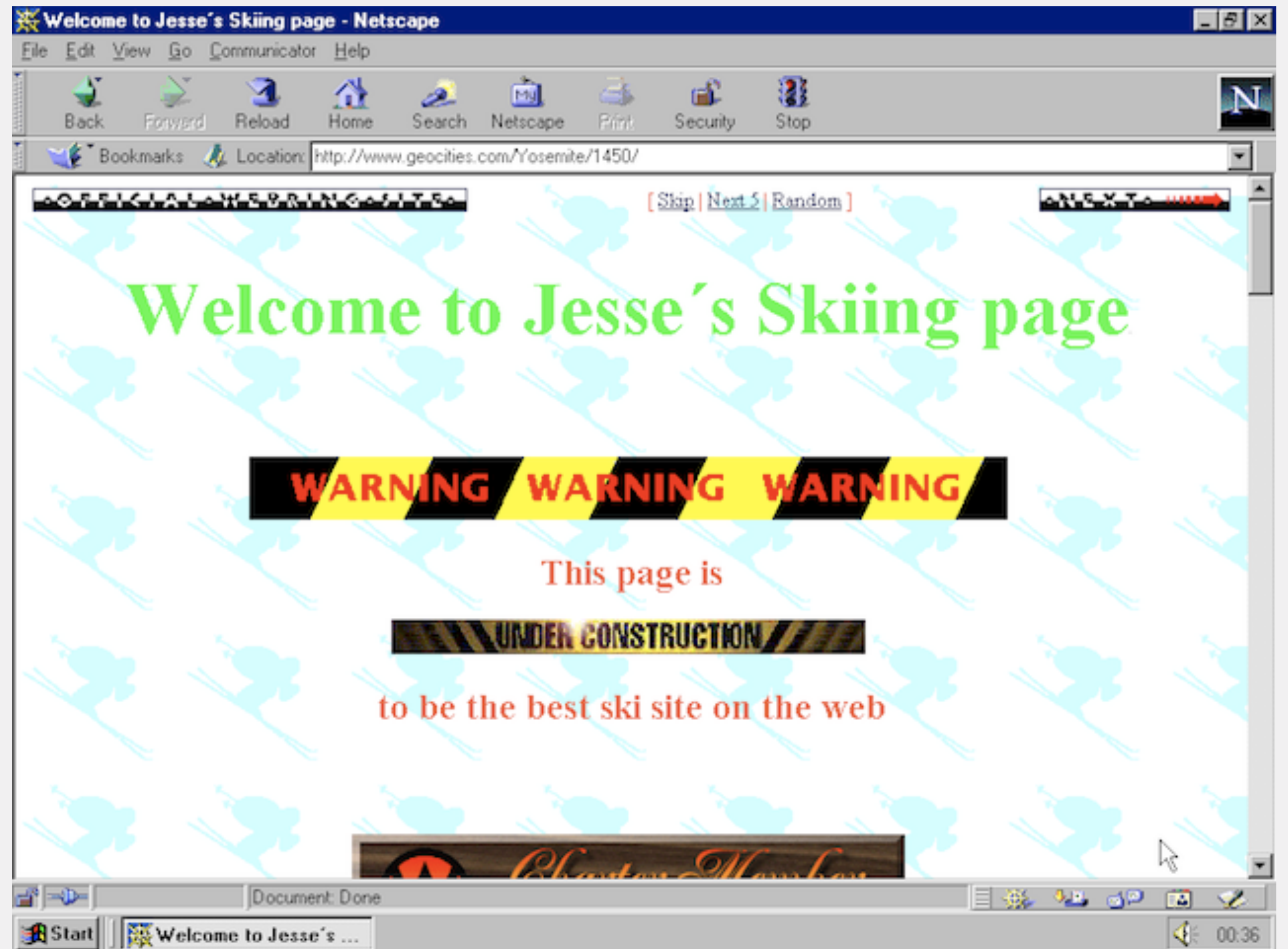


The image shows a multi-level structure, possibly a boat or a viewing platform, with a boat on the top level and a boat on the bottom level. The text "The world of TODAY" is overlaid in the center. The background is a dark, slightly blurred scene of a boat on water.

# The world of **TODAY**

# Flow layout

The default layout method



# Table layout

Abusing the table element for layouts

The screenshot shows the BBC website's 'ON THIS DAY' section for May 5th, 2005. The page is structured as follows:

- Header:** BBC Home logo, search bar, and 'Explore the BBC' button.
- Section Header:** 'ON THIS DAY' with a date range of 1950-2005, and '5 May' with the BBC NEWS logo.
- Navigation:** 'Search ON THIS DAY by date' with a date selector (5, May) and a 'GO' button.
- Menu:** 'Front Page | Years | Themes | Witness' and 'About This Site | Text Only'.
- Main Article:**
  - Section:** '2005: Blair secures historic third term'.
  - Text:** 'Tony Blair has won a historic third term in government for Labour but with a drastically reduced majority. Mr Blair pledged to respond "sensibly and wisely" to the result, which the BBC predicts will see his majority cut from 167 in 2001 to 66. The Conservatives have mounted a strong challenge but their overall share of the vote will be similar to 2001. The Lib Dems have made big inroads into Labour majorities and look set to end up with an estimated 60 seats.'
  - Links:** 'Read more of this story on BBC News' and 'E-mail this story to a friend'.
- Video Player:** 'Watch/Listen' section with a video of Blair and a 'PLAY VIDEO' button. Caption: 'Blair's majority has been reduced'. Link: 'BBC reports on the 2005 election results'.
- Sidebar:** 'Stories From 5 May' with a list of historical events:
  - 1980: SAS rescue ends Iran embassy siege
  - 1981: Bobby Sands dies in prison
  - 1961: Shepard becomes first US astronaut
  - 2005: Blair secures historic third term
  - 2001: Sun shines on foot-and-mouth crisis
  - 1955: Dr Salk promotes polio vaccine in UK
  - 1967: First all-British satellite 'Ariel 3' launched
- Footer:** Search bar, BBC logo, 'back to top' link, 'Front Page | Years | Themes | Witness' menu, and copyright information '©MMVIII | News Sources | Privacy & Cookies Policy'.

# Mobile and desktop websites

[m.bbc.co.uk](http://m.bbc.co.uk) for mobiles

[bbc.co.uk](http://bbc.co.uk) for desktops

# Fluid and fixed layouts

Cleverly misusing CSS property float: left and percentages or fixed width boxes





MAY 25, 2010

## Responsive Web Design

by **ETHAN MARCOTTE**Published in: [CSS](#), [Layout](#), [User Interface Design](#) | [Discuss this article »](#)

“The control which designers know in the print medium, and often desire in the web medium, is simply a function of the limitation of the printed page. We should embrace the fact that the web doesn’t have the same constraints, and design for this flexibility. But first, we must “accept the ebb and flow of things.”

John Allsopp, [“A Dao of Web Design”](#)

The English architect Christopher Wren once quipped that his chosen field “aims for Eternity,” and there’s something appealing about that formula: Unlike the web, which often feels like aiming for next week, architecture is a discipline very much defined by its permanence. A building’s foundation defines its footprint, which defines its frame, which shapes the facade. Each phase of the architectural process is more immutable, more unchanging than the last. Creative decisions quite literally shape a physical space, defining the way in which people move through its confines for decades or even centuries.

### Search ALA

   
 include discussions

### Topics

- ◆ [Code](#)
- ◆ [Content](#)
- ◆ [Culture](#)
- ◆ [Design](#)
- ◆ [Process](#)
- ◆ [User Science](#)

### Snapshot

Learn how to use fluid grids, flexible images, and media queries to create elegant user experiences with responsive web design.

[Ad via The Deck](#)

### JOB BOARD

[Crispin Porter + Bogusky is looking for a Experience Designer.](#)

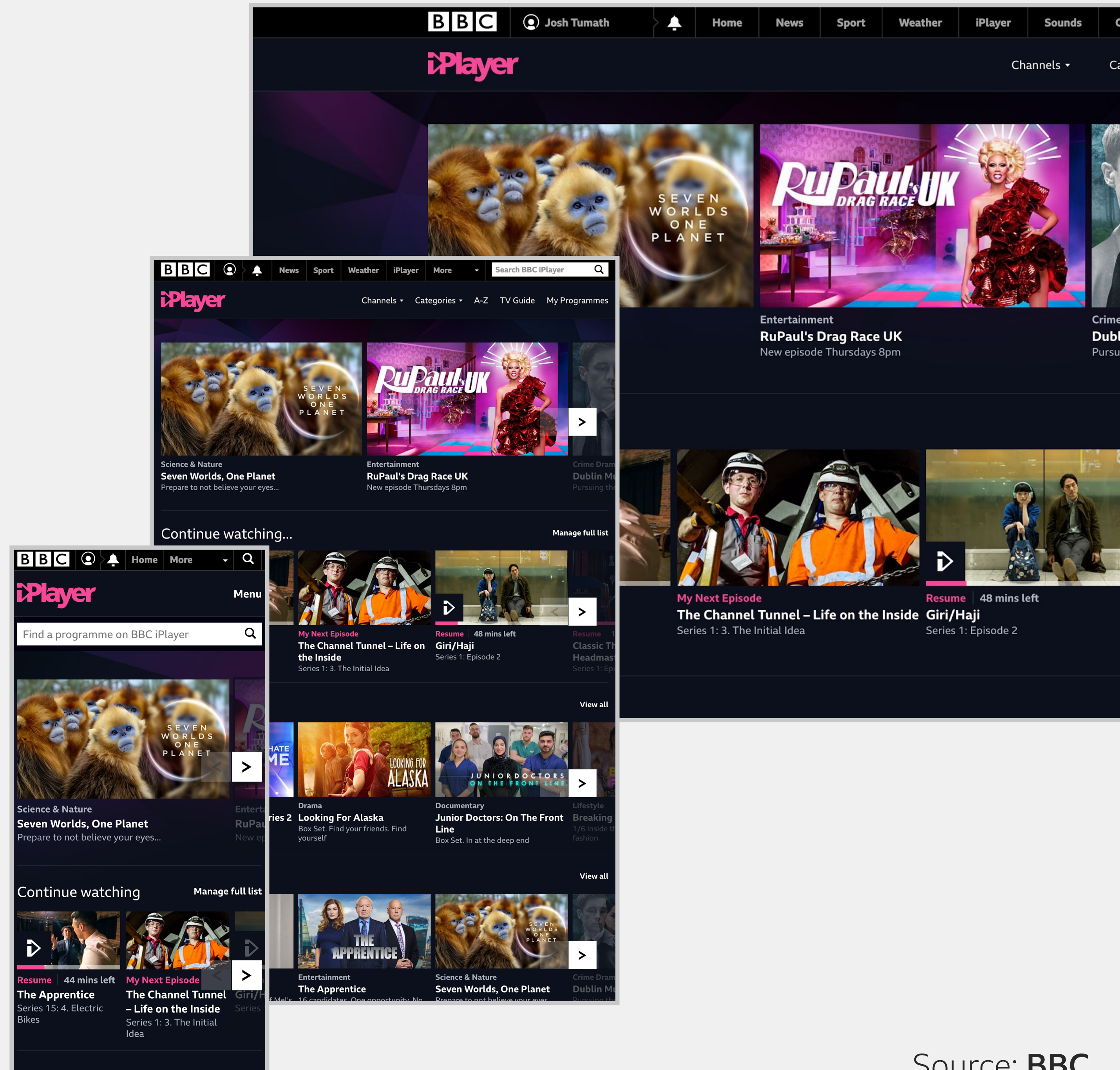
More on the [Job Board](#).

### A Book Apart



# Responsive layouts

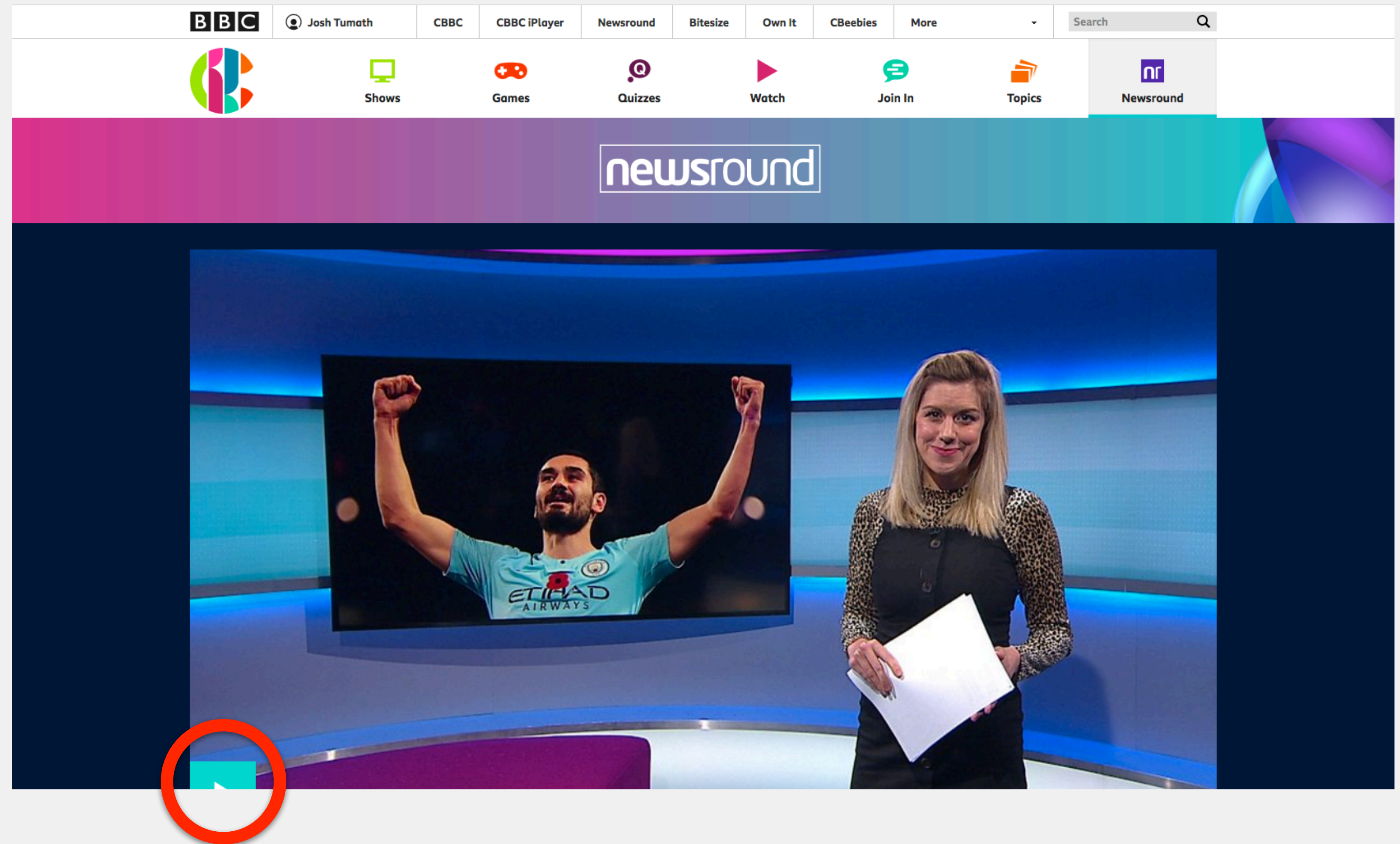
The full power of CSS Media Queries



# The limitations of **Responsive Web Design**

# Where's the fold?

We can't easily size things so that they don't get cut off at the fold



# Can't mix fluid and fixed

All grid columns must be either fixed or percentage widths

## Grid

This is a working demo of the [GEL Grid Guidelines](#). The demo shows how our flexible, percentage-based grid works and how you can use it to create a BBC website.

Your device is currently using:  
Group 4 - Large (900px)  
Margins: 16px | Gutters: 16px

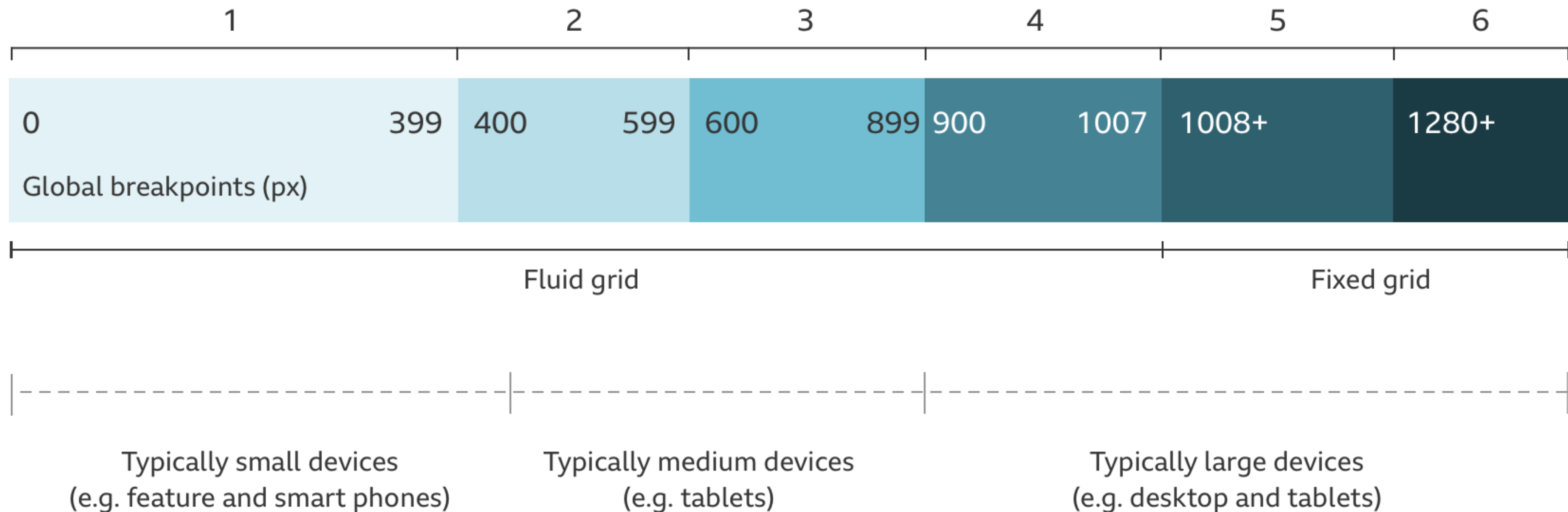
[Toggle RTL On](#) [Toggle Grid Overlay Off](#)

### Sizes

100%										
50%					50%					
33.333%				33.333%				33.333%		
25%			25%			25%			25%	
20%			20%		20%			20%		20%
12.5%	12.5%		12.5%		12.5%		12.5%		12.5%	

### Example grid combinations

# Stick to the breakpoints



A futuristic space station interior with a large circular hatch in the center. Several people in various suits are visible, some standing and some floating. The scene is dimly lit with a reddish-brown hue. The text "The world of TOMORROW" is overlaid in the center.

# The world of **TOMORROW**

**It's all about design systems**



$\text{minmax}(n, m)$

*fr units*

@supports

aspect-ratio

Subgrids

Multi-column

Flex

$\text{min}(n, m)$

$\text{max}(n, m)$

# New in CSS

# Grids

min-content

max-content

Shapes

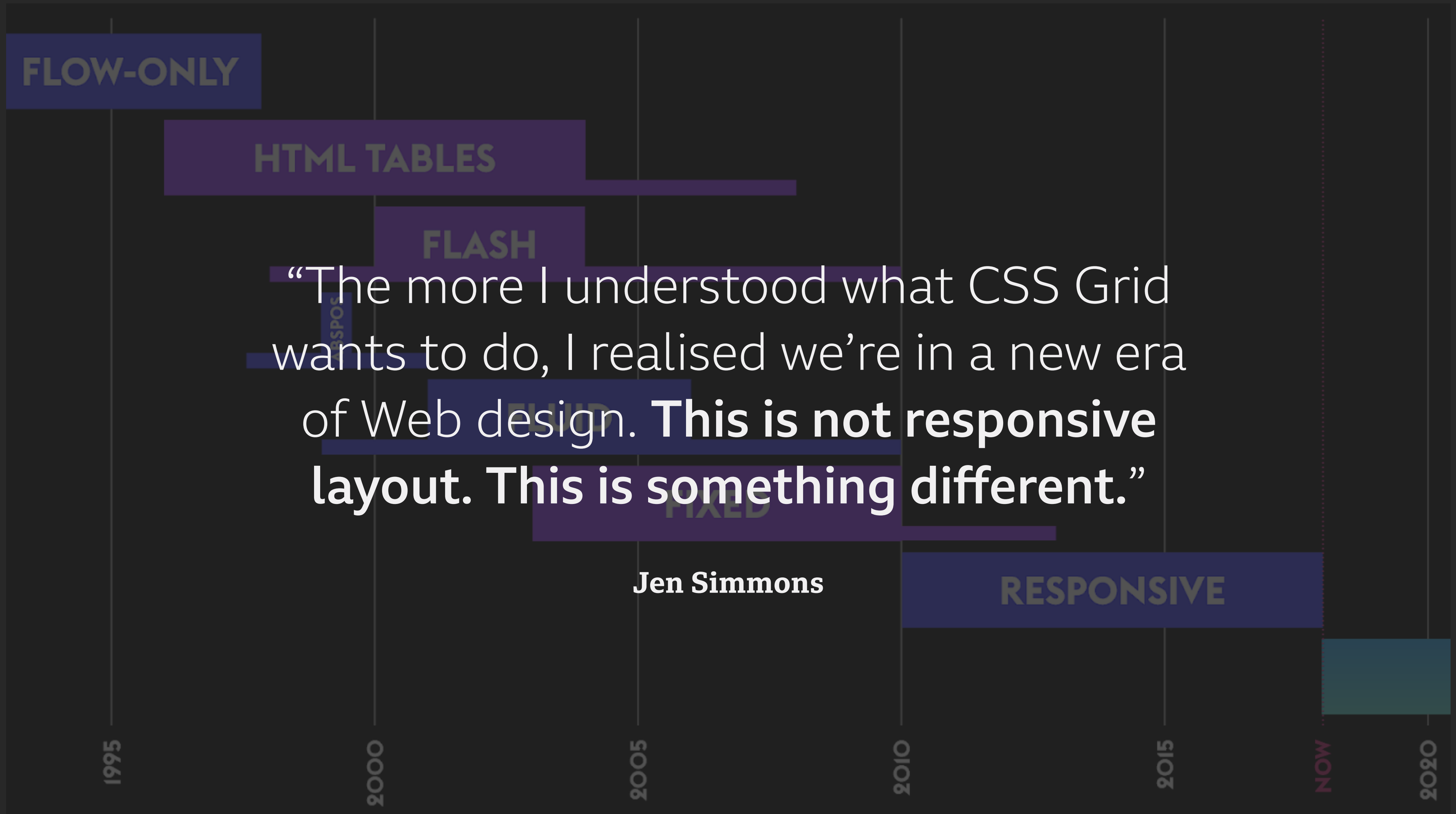
Regions

$\text{clamp}(min, value, max)$

# Everything You Know About Web Design Just Changed



Jen Simmons  
View Source London  
October 2018



“The more I understood what CSS Grid wants to do, I realised we’re in a new era of Web design. **This is not responsive layout. This is something different.**”

Jen Simmons

# Intrinsic Web Design

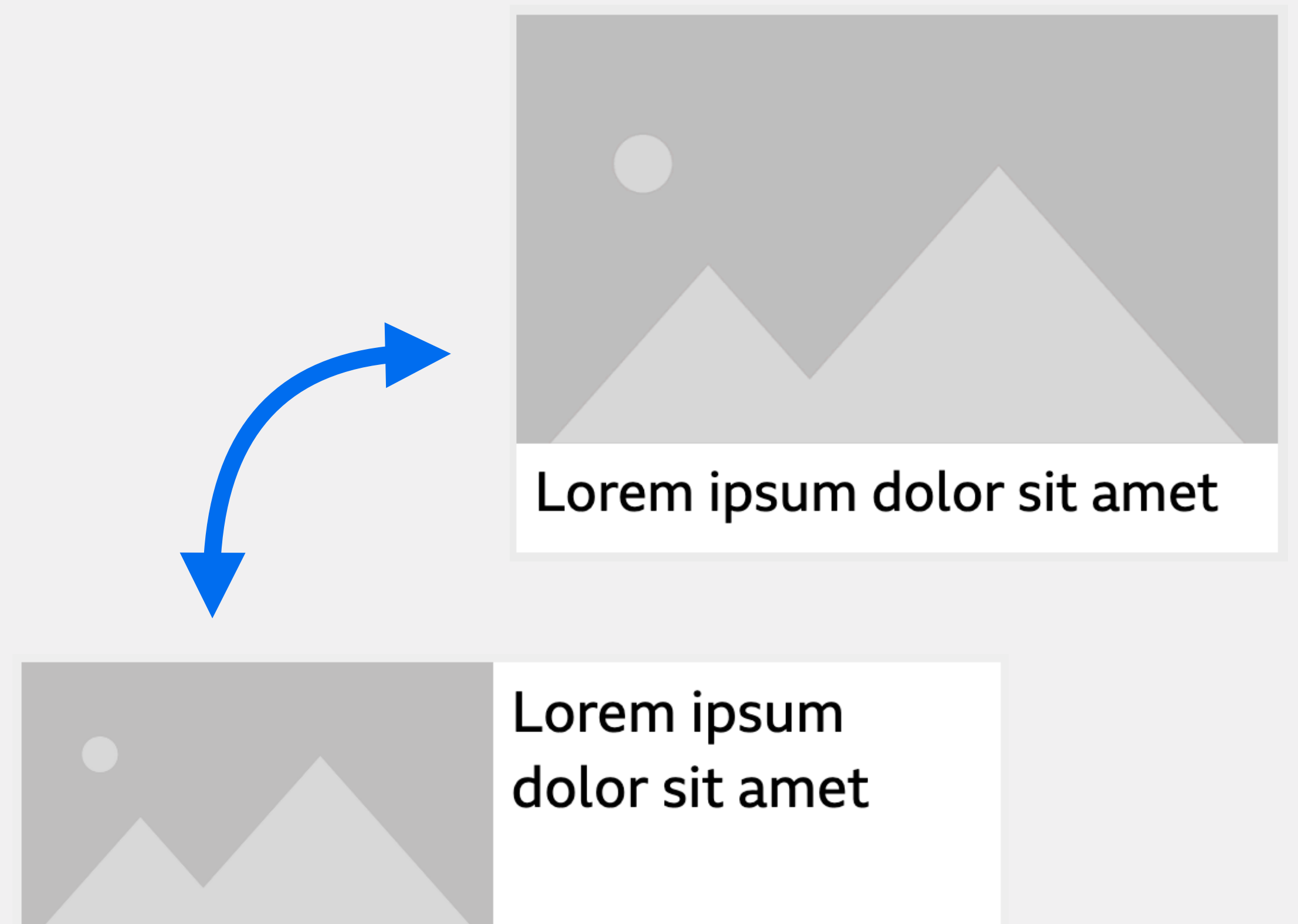
# Intrinsic Web Design

# Intrinsic Web Design

# Intrinsic Web Design

# Intrinsic?

- The content knows how to fill its space
- It's about setting constraints instead of setting breakpoints
- Capable of mixing fixed and fluid columns in the same layout
- No need for Media Queries (usually)!





## Hello World



Lorem ipsum dolor  
sit amet



Lorem ipsum dolor  
sit amet



Lorem ipsum dolor  
sit amet



Lorem ipsum dolor  
sit amet



Lorem ipsum dolor  
sit amet



Lorem ipsum dolor  
sit amet

## Sidebar

Lorem ipsum dolor sit amet,  
consectetur adipiscing elit, sed do  
eiusmod tempor incididunt ut  
labore et dolore magna aliqua. Ut  
enim ad minim veniam, quis  
nostrud exercitation ullamco  
laboris nisi ut aliquip ex ea  
commodo consequat.

# **This changes everything**

And as designers and developers,  
we need to understand what we can do.



# Layouts

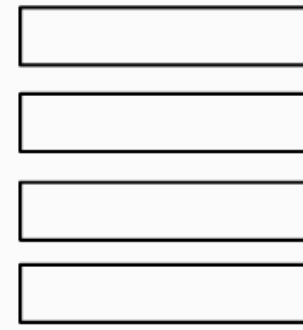
Each of the following *layout primitives* is documented with a code generator, and includes a custom element implementation. You can use them together, in *composition*, to create robust and responsive layouts without the need for `@media` breakpoints.

## RUDIMENTS

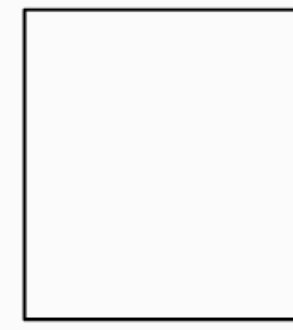
- Boxes
- Composition
- Units
- Global and local styling
- Modular scale
- Axioms

## LAYOUTS

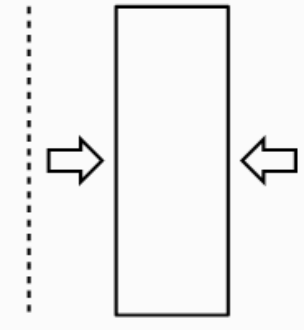
- Picture index
- The Stack
- The Box
- The Center
- The Cluster
- The Sidebar
- The Switcher
- The Cover
- The Grid
- The Frame
- The Reel
- The Imposter



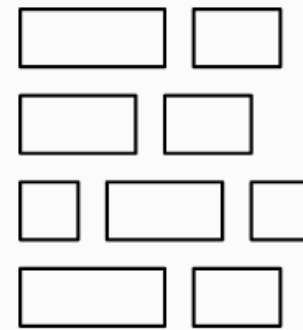
The Stack



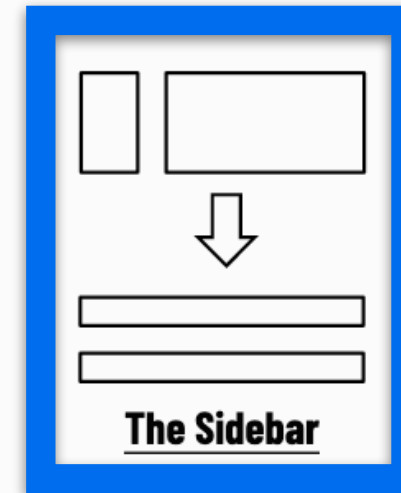
The Box



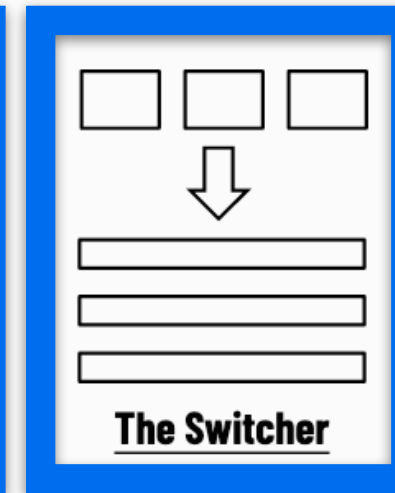
The Center



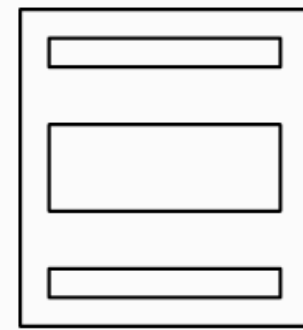
The Cluster



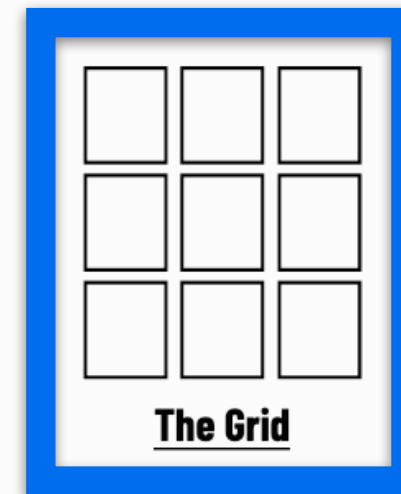
The Sidebar



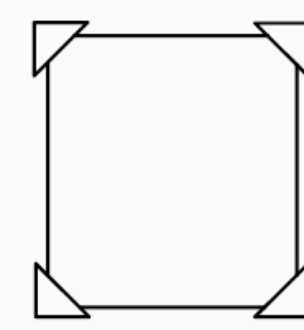
The Switcher



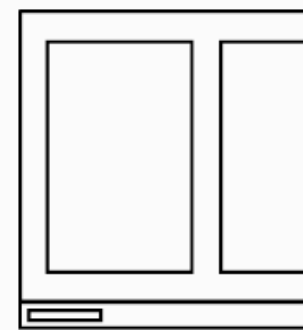
The Cover



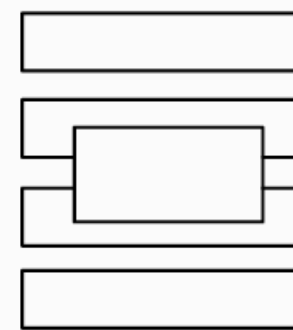
The Grid



The Frame




The Reel



The Imposter

Every Layout is created by  
Heydon Pickering & Andy Bell  
[Privacy Policy](#) - [Terms and conditions](#)

**Intrinsic  
Web Design** + **Design  
Systems** = 

**So how are we using it  
at the BBC?**

**We're not**

\*but we're thinking about it



## This Country: 'Everyone knows a Kerry and Kurtan'

Daisy May and Charlie Cooper are the sibling duo behind the award-winning BBC Three comedy, This Country.

They sat down with Radio 1 Newsbeat to chat about what to expect from This Country's third series, which will air early next year. A new book, published earlier this month, will keep fans going until then.

Aside from dropping an accidental spoiler, they also opened up about what it was really like growing up in a small village, why the show has attracted such a devoted following, and why Daisy would rather wear bin bags to the Baftas.

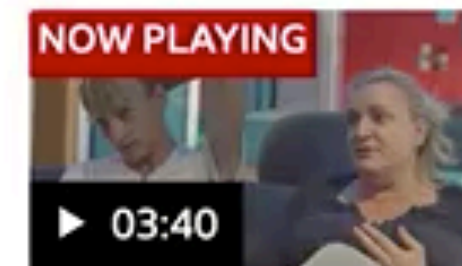
*Interview by Annabel Rackham and filming by Imran Rahman-Jones*

## Top Videos



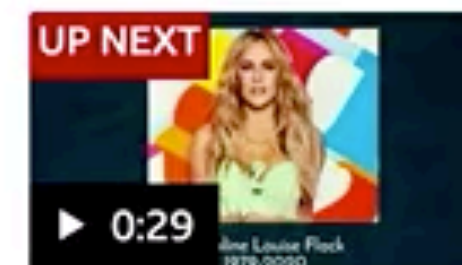
**Billie Eilish on Bond and online bullying**

4h ago | BBC News



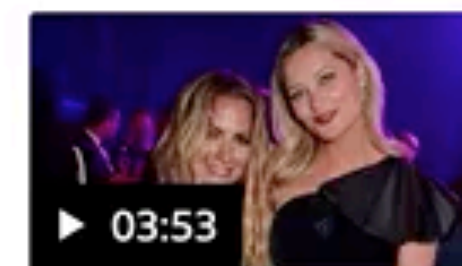
**This Country: 'Everyone knows a Kerry and Kurtan'**

20 October 2019 | BBC News



**Love Island tribute to Caroline Flack**

17 Feb 2020 | BBC News



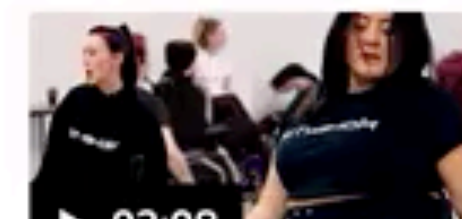
**Caroline Flack: Laura Whitmore's emotional tribute**

3 days ago | BBC News



**Photography exhibit asks people to challenge victim blaming**

14 Feb 2020 | BBC News



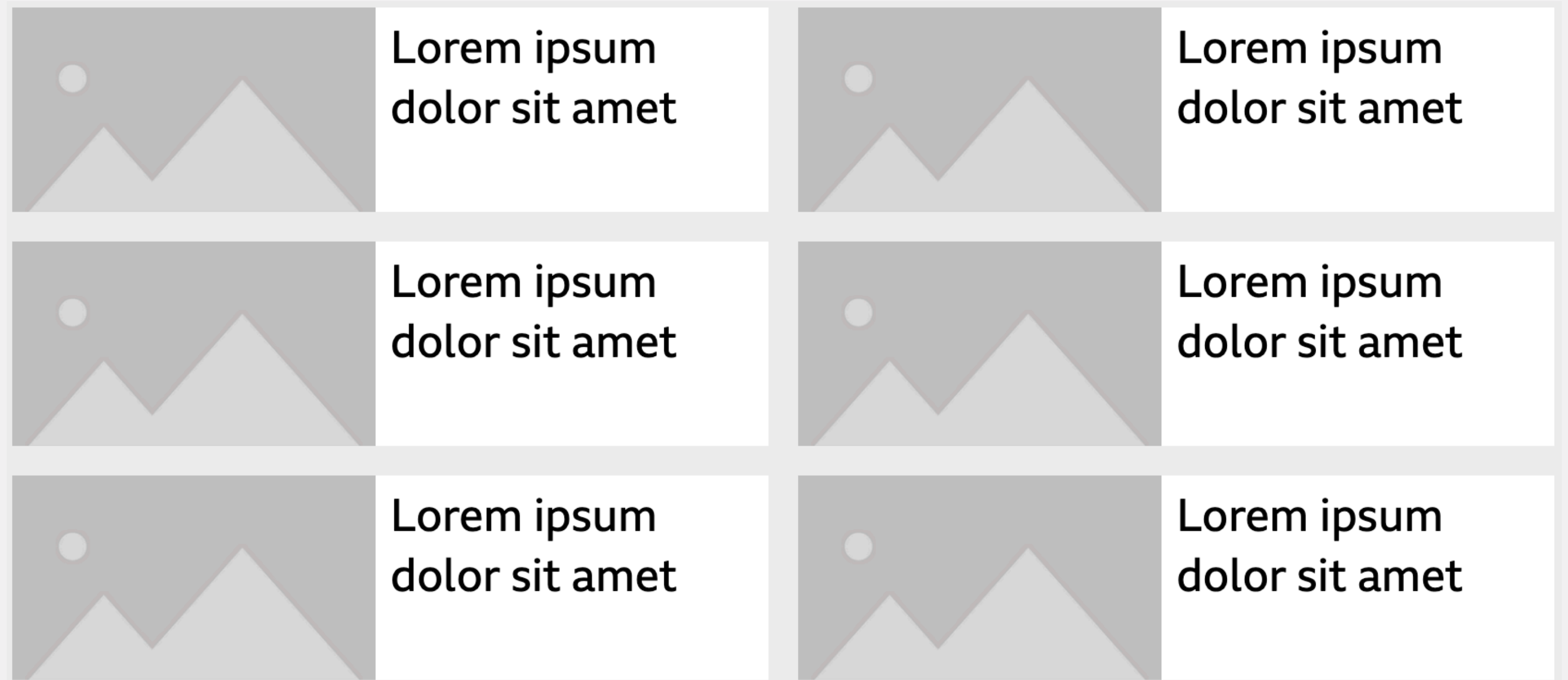
**Winchester friends set up wheelchair dance class**

A futuristic architectural rendering of a multi-level transit hub. The scene is viewed from an elevated perspective, looking down into a central area where several cars are parked or moving. Above this level, a monorail train is visible, suspended from a complex network of white structural beams. The ceiling is a dense grid of blue and white lines, with circular light fixtures. People are scattered throughout the space, providing a sense of scale. The overall aesthetic is clean, modern, and technologically advanced.

# The principals of **TOMORROW**

**How to put intrinsic layouts in your design system**














```
.grid {  
  display: grid;  
  gap: 1rem;  
  grid-template-columns: repeat(auto-fit, minmax(500px, 1fr));  
}
```

# Avoid Media Queries

# Split layouts from components

You can avoid re-implementing layouts in each component

## G E L

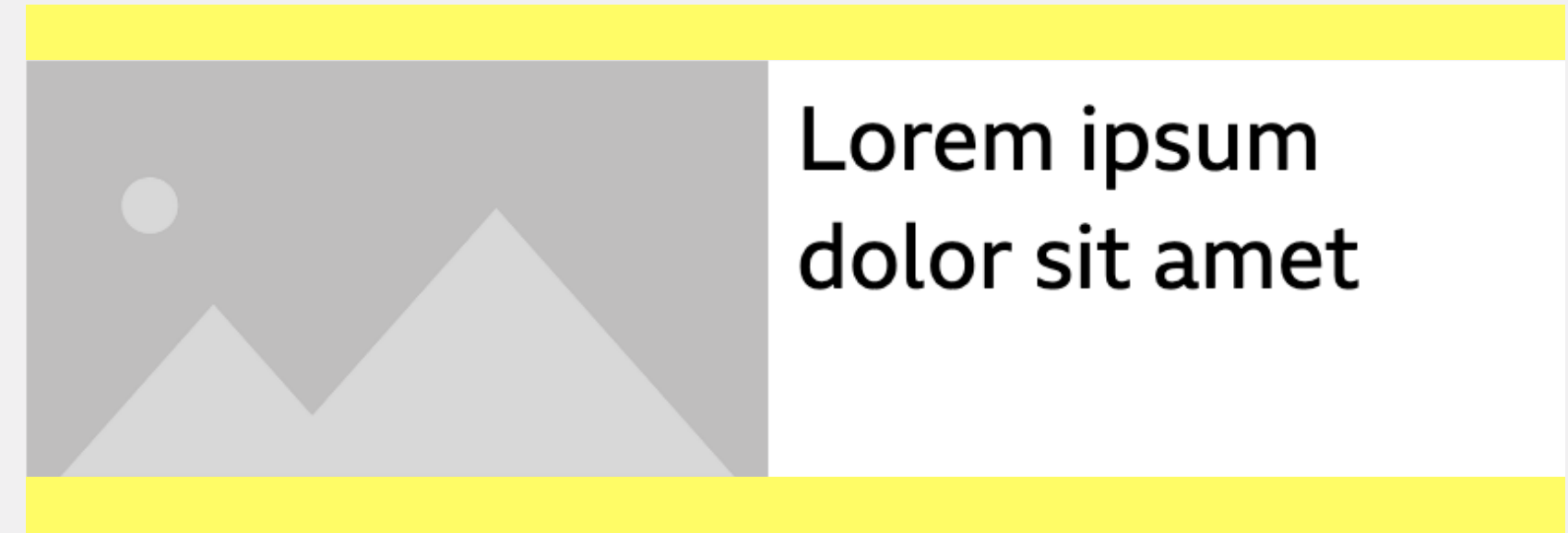
- ▶  Components
- ▼  Foundations
  -  Breakpoints
  -  Spacing
  -  Typography
- ▼  Layouts
  - ▶  Grid
  - ▶  Stack
  - ▶  Wrap

# Don't set margins on the edges of components

Let the parent components do that instead



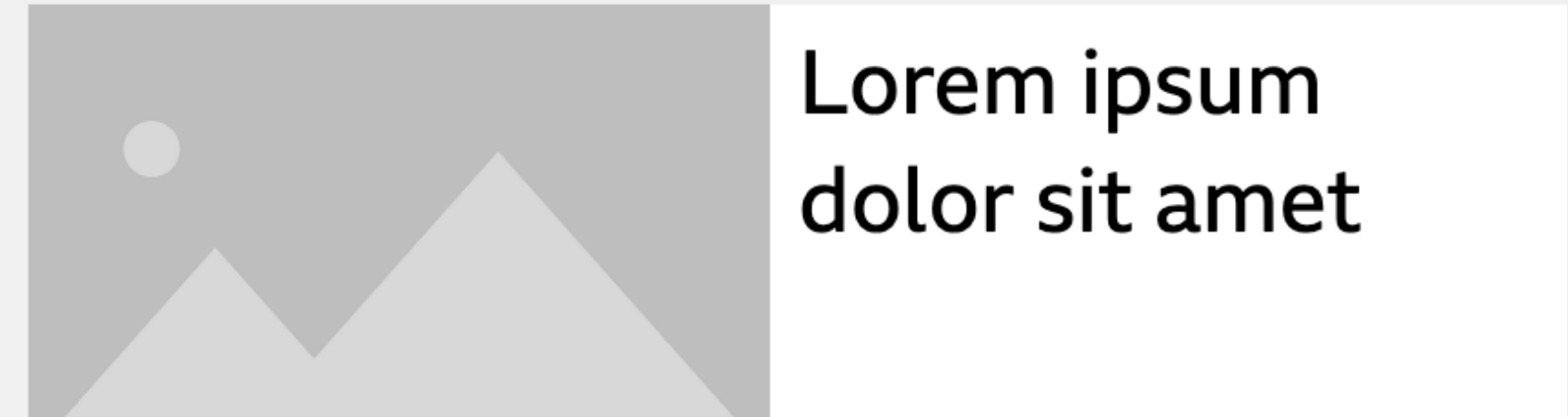
```
.card {  
  margin: 1rem 0;  
}
```



```
.stack > * + * {  
  margin-top: 1rem;  
}  
  
.grid {  
  display: grid;  
  gap: 1rem;  
}
```

# Encapsulate the styles of each component

Don't let parent components change the style of a component



```
<Card>
  <div class="card-image">
    <Image />
  </div>
  <div class="card-content">
    <p>Lorem ipsum</p>
  </div>
</Card>
```



```
.Card .Image {
  width: 50%;
}
```

**Be careful mixing intrinsic  
layouts with media queries**

# So what do we need to do?

- Spread the word to everyone you know!
- Play around with CSS Grid and Flexbox
- Subscribe to Rachel Andrew, Jen Simmons and Adam Argyle
- See what you can do today

# Thank you



**@joshtumath**

**<https://joshtumath.uk>**